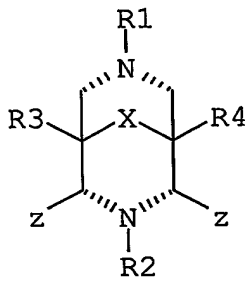
We claim:

1. A bleaching composition comprising:

a) a monomer ligand, L, or transition metal catalyst thereof of a ligand having the formula (I):



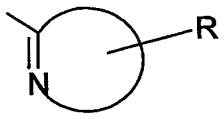
(I)

wherein R1 and R2 may be selected from the group consisting of:
a group containing a heteroatom capable of coordinating to a transition metal;
a -C1-C22-optionally substituted-alkyl;
a -C6-C10-aryl;
a -C1-C4-alkyl-C6-C10-aryl; and,

wherein at least one of R1 and R2 is a non-aromatic hydrocarbon group, the non-aromatic hydrocarbon group being a C8-C22-alkyl chain;

R3 and R4 are independently selected from: hydrogen, C1-C4-alkyl, phenyl, electron withdrawing groups and reduced products and derivatives thereof;

X is selected from: C=O, a ketal derivative of C=O, a thioketal of derivative of C=O, and $-[C(R6)_2]_y-$ wherein y takes a value 0 or 1; each R6 is independently selected from hydrogen, hydroxyl, O-C1-C24-alkyl, O-benzyl, O-(C=O)-C1-C24-alkyl, and C1-C24-alkyl;

z groups are same monocylcic or dicyclic heteroaromatic N-donor groups of the form:  wherein R is -C0-C4-alkyl, and,

b) the balance carriers and adjunct ingredients, together with at least 2 % wt/wt of a peroxygen bleach or source thereof.

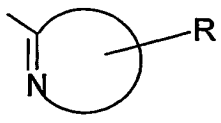
2. A bleaching composition according to claim 1, wherein the group containing a heteroatom capable of coordinating to a transition metal is selected from the group consisting of: an optionally substituted tertiary amine of the form -C2-C4-alkyl-NR7R8, in which R7 and R8 are independently selected from the group consisting of straight chain, branched or cyclo C1-C12 alkyl, benzyl, the -C2-C4-alkyl- of the -C2-C4-alkyl-NR7R8 may be substituted by 1 to 4 C1-C2-alkyl, or may form part of a C3 to C6 alkyl ring, and in which R7 and R8 may together form a saturated ring containing one or more other heteroatoms;
a heterocycloalkyl: selected from the group consisting of: pyrrolinyl, pyrrolidinyl, morpholinyl, piperidinyl, piperazinyl, hexamethylene imine, 1,4-piperazinyl, tetrahydrothiophenyl, tetrahydrofuranyl, tetrahydropyranyl,

and oxazolidinyl, wherein the heterocycloalkyl may be connected to the ligand via any atom in the ring of the selected heterocycloalkyl;

a -C1-C6-alkyl-heterocycloalkyl, wherein the heterocycloalkyl of the -C1-C6-alkyl-heterocycloalkyl is selected from the group consisting of: piperidinyl, piperidine, 1,4-piperazine,tetrahydrothiophene, tetrahydrofuran, pyrrolidine, and tetrahydropyran, wherein the heterocycloalkyl may be connected to the -C1-C6-alkyl via any atom in the ring of the selected heterocycloalkyl; and,

a -C1-C6-alkyl-heteroaryl, wherein the heteroaryl of the -C1-C6-alkyl-heteroaryl is selected from the group consisting of: pyridinyl, pyrimidinyl, pyrazinyl, triazolyl, pyridazinyl, 1,3,5-triazinyl, quinolinyl, isoquinolinyl, quinoxalinyl, imidazolyl, pyrazolyl, benzimidazolyl, thiazolyl, oxazolidinyl, pyrrolyl, carbazolyl, indolyl, and isoindolyl, wherein the heteroaryl may be connected to the -C1-C6-alkyl via any atom in the ring of the selected heteroaryl and the selected heteroaryl is optionally substituted by a group selected from the group consisting of a -C1-C4-alkyl, -C0-C6-alkyl-phenol, -C0-C6-alkyl-thiophenol, -C2-C4-alkyl-thiol, -C2-C4-alkyl-thioether, -C2-C4-alkyl-alcohol, -C2-C4-alkyl-amine, and a -C2-C4-alkyl-carboxylate.

3. A bleaching composition according to claim 1 or 2, wherein z groups are same heteroaromatic groups of the form:



selected from the group consisting of:

pyridinyl; quinolinyl, pyrazolyl, imidazolyl; benzimidazolyl; and thiazolyl, and wherein R is -C0-C4-alkyl.

4. A bleaching composition according to claim 3, wherein z is pyridinyl optionally substituted by -C0-C4-alkyl.

5. A bleaching composition according to any one of claims 1 to 4, wherein at least one of R1 and R2 is a non-aromatic hydrocarbon group, the non-aromatic hydrocarbon group being a C10-C20 alkyl chain.

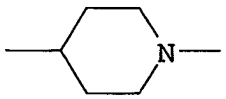
6. A bleaching composition according any preceding claim, wherein one of R1 and R2 is selected from the group consisting of: Me, CH2-C6H5, and pyridin-2-ylmethyl, wherein the pyridin-2-ylmethyl is optionally substituted by C1-C4-alkyl.

7. A bleaching composition according to claim 6, wherein one of R1 and R2 is a pyridin-2-ylmethyl that is optionally substituted by C1-C4-alkyl.

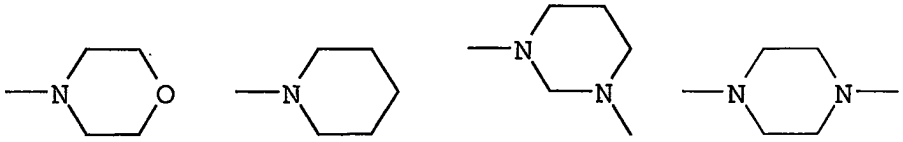
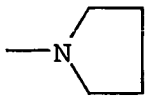
8. A bleaching composition according to any one of claims 1 to 6, wherein one of R1 and R2 is selected from the group consisting of:
an optionally substituted tertiary amine of the form -C2-C4-alkyl-NR7R8, in which R7 and R8 are independently selected from the group consisting of straight chain, branched or cyclo C1-C12 alkyl, -CH2-C6H5, wherein the C6H5 is optionally substituted by -C1-C4-alkyl or -O-C1-C4-alkyl, and pyridin-2-ylmethyl wherein the pyridine is optionally

substituted by C1-C4-alkyl, the -C2-C4-alkyl- of the -C2-C4-alkyl-NR7R8 may be substituted by 1 to 4 C1-C2-alkyl, or may form part of a C3 to C6 alkyl ring, and in which R7 and R8 may together form a saturated ring containing one or more other heteroatoms.

9. A bleaching composition according to claim 8, wherein the optionally substituted tertiary amine of the form -C3-alkyl-NR7R8.

10. A bleaching composition according to claim 9, wherein the -C3-alkyl-NR7R8 is  .

11. A bleaching composition according to claim 8, wherein the optionally substituted tertiary amine of the form -C2-alkyl-NR7R8.

12. A bleaching composition according to claim 8, wherein -NR7R8 is selected from group consisting of: -NMe2, -NEt2, -N(*i*-Pr)2,  , and  .

13. A bleaching composition according to any preceding claim, wherein R3 and R4 are selected from the group consisting of: -C(O)O-C1-C24-alkyl, -C(O)-O-C1-C24-aryl -

CH2OC(O)C1-C20-alkyl, benzyl ester, phenyl, benzyl, CN, hydrogen, methyl, and C1-C4-OR wherein R is selected from the group consisting of H, C1-C24-alkyl or C(O)-C1-C24-alkyl.

14. A bleaching composition according to claim 13, wherein R3 and R4 are selected from the group consisting of -CH2OH, -C(O)-O-CH2C6H5 and -C(O)O-C1-C6-alkyl.

15. A bleaching composition according to claim 14, wherein R3 and R4 are selected from the group consisting of: -C(O)-O-CH3, -C(O)-O-CH2CH3, -C(O)-O-CH2C6H5 and CH2OH.

16. A bleaching composition according to any preceding claim, wherein: R3 = R4.

17. A bleaching composition according to any preceding claim, wherein X selected from the group consisting of: C=O, CH2, C(OH)2, *syn*-CHOR and *anti*-CHOR, wherein R is H, C1-C24-alkyl or C(O)-C1-C24-alkyl.

18. A bleaching composition according to claim 17, wherein X is C=O or C(OH)2.

19. A bleaching composition according to claim 18, wherein X is C=O.

20. A bleaching composition according to claims 1 to 19, wherein the complex is of the general formula (A1):

$$[M_aL_kX_n]Y_m \qquad (A1)$$

in which:

M represents a metal selected from Mn(II)-(III)-(IV)-(V), Cu(I)-(II)-(III), Fe(II)-(III)-(IV)-(V), Co(I)-(II)-(III), Ti(II)-(III)-(IV), V(II)-(III)-(IV)-(V), Mo(II)-(III)-(IV)-(V)-(VI) and W(IV)-(V)-(VI);

X represents a coordinating species selected from any mono, bi or tri charged anions and any neutral molecules able to coordinate the metal in a mono, bi or tridentate manner;

Y represents any non-coordinated counter ion;

a represents an integer from 1 to 10;

k represents an integer from 1 to 10;

n represents an integer from 0 to 10;

m represents zero or an integer from 1 to 20; and

L represents a ligand as defined in claims 1 to 19, or its protonated or deprotonated analogue.

21. A bleaching composition according to claim 20, wherein M represents a metal selected from Fe(II)-(III)-(IV)-(V).

22. A bleaching composition according to claim 21, wherein M represents a metal selected from Fe(II) and Fe(III).

23. A bleaching composition according to claim 22, wherein the ligand is present in the form selected from the group consisting of [FeLCl]Cl ; [FeL(H2O)](PF6)2; [FeLCl]PF6 and [FeL(H2O)](BF4)2.